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ABSTRACT

A study of the time- and aspect-marking of 24-month-old native Mandarin-speaking children analyzed their language during free play, and matched fifty utterance samples containing active predicates with all utterances using the perfective suffix "-le." It was found that the children mentioned the future, particularly their immediate intentions, twice as often as the past. Features that correlated with the children's use of the "-le" perfective were found to be tied to the child's personal experience of events. Characteristics of the events included pastness, a clear end point, the re-enactment potential, transitivity, and agentivity, in that declining order of statistical occurrence. It is concluded that, in general, young children express their more elaborate time and aspect distinctions when they are talking about the events that affect them most directly. Personal involvement was found to be a far more powerful trigger for aspect marking than were syntactic or semantic factors. These results are found to parallel results of research on Turkish-speaking children. (MSE)

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PERSONAL INVOLVEMENT AND THE DEVELOPMENT OF LANGUAGE FOR TIME-ASPECT

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OVERVIEW. While two-year-old children have a rudimentary understanding of both past and future events, they seldom make time or aspect explicit in their speech. (Harner 1982, Weist, 1984.) Evidence from child Mandarin show that even the type of real-world event described is relatively unimportant in predicting what, if any, time or aspect markers the child will use in her description. Even the actual event time is relatively unimportant in prompting a two-year-old to describe an action as having happened in the past.

In fact, the only clear factor which prompts a young the Chinese child to mention time is the degree to which the child is personally involved in the experience. The more active sensori-motor reinforcement the child has, the more likely she is to add time or aspect to her description. Everyone has the most to say about their own experiences.

The two twenty-four-month old Mandarin-speaking children in this study virtually never marked time or aspect. The only exception was their broad use of the perfective verb suffix -le. The children were significantly more likely to use -le when they recounted a few prototypical relationships, particularly: 1. The child's own agentive actions. 2. Patient-processes which affected small objects which the child herself had been handling. This is especially true for punctual actions such as falling, breaking, bumping, opening, and closing. The Chinese two-year-olds were most unlikely to mark time or aspect when they observed these very same events when they affected to other people or things.

The few exceptions to this egocentric speech occurred when the child was receiving some form of external perceptual support such as: immediate imitation of adult speech; well-rehearsed family routines, e.g. "Mama has gone to work;" and comments of familiar pictures, if and only if the child was spontaneously pointing at them.

The very diversity of these factors which elicit time marking argues against a purely syntactic, semantic, or pragmatic explanation, since the critical variable can be any one of a number of overlapping aides memoires to sensori-motor re-enactment. These are ranked from most to least influential: Pastness, Clear end point, Re-enactment potential, Transitivity, and Agentivity.

These factors are additive. They are critical to describing perfectives in any language. Even more important, they predict a universal set of experiences which prompt people to mention time even in pidgin and early child speech where time marking is typically more

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informative than redundant. These same factors should also underlie semantically redundant, automatic, syntactic marking tense-aspect systems. The rank ordering should hold up cross-linguistically as well.

METHODS. This study analyses ten hours of speech from of two Chinese children. Both are native speakers of Mandarin whom I taped during free play with their families in Taipei, Taiwan. Both children were 24 months old during the study. I taped four hours within one week of Lao Hu ("Tiger")'s second birthday, as well six hours of semi-weekly visits to Pang ("Chubby") for the three months when she was between ages 1.9.28 - 2.0.21. Both children's MLU's fluctuated without any significant increase during this time. Lao Hu's MLU was 2.31, while Pang's averaged 2.12. I taped extensive simultaneous contextual notes for both children. (Erbaugh 1982.)

I compared matched samples of fifty utterances from the children's overall spontaneous speech which contains active predicates, with all their utterances which use the perfective -le.

TIME RELATIONS. Both children frequently mentioned both past an future events, e.g. having had a family picture taken, or plans to go swimming. However, they referred to the past either with a single noun, e.g. "photo," or with an unmarked verb, comparable to "swim." Context alone establishes real time. This was rarely a problem, since 95% of the events described occurred in the immediate time frame, either simultaneous with the remark, or only a few seconds before or after it. The children never once mentioned a non-immediate future event, not even one for later in the day. (They frequently heard such references, and seemed to understand them.) They only rarely mentioned non-immediate past events, even ones which had happened earlier in the day.

The children mentioned to the future twice as often as to the past. They were particularly likely to announce their immediate intentions, often without the obligatory modal auxiliary, e.g. *wo hua pinguo *"I draw apple," for *wo lai hua yi.ge pinguo "I'm gonna draw an apple." Immediate plans are generally relatively well-formulated and accessible to introspection, in contrast to difficulties of conjuring up a hazily-remembered past, or the even cloudier future.

TABLE 1 REAL TIME FOR EVENTS MENTIONED

OVERALL SPEECH	PAST	PRESENT	FUTURE
Lao Hu	34%	8%	68%
Pang	26%	18%	56%

CHARACTERISTICS OF THE -LE PERFECTIVE. Chinese has no tense system, though time adverbs comparable to "now" or "yesterday" may be used as needed. The verbs themselves are invariant whether they refer to the past, the present, or the future, c.f. "I go to school now," "Yesterday I go to school." There is, however, an elaborate aspectual system.

The Mandarin perfective verb suffix -le is by far the most common and important aspect marker. It refers to events which are envisioned as being completed, e.g. wo tiao.le, I jump+perfective. Given the nature of human experience, most of the completed events which we describe have occurred in the past, so -le is the de facto Mandarin translation for most European past tense sentences, as well as perfectives. That is, wo tiao.le in isolation means both "I jumped" and "I have jumped." (Li and Thompson, 1981.)

The Mandarin perfective is also homophonous with a sentence final particle for a perfect form which is written with the same character. (Other dialects use contrasting particles, so comparative acquisition studies would be revealing.) Li and Thompson transliterate the perfect as LE, and discuss it as a Currently Relevant State. For example, wo chi manguo simply means "I eat mangos (habitually)." Adding the perfective gives "I ate/have eaten mangos," wo chi.le manguo. This contrasts with a perfect sentence, wo chi manguo LE, which implies "do you believe it, I'm eating actually eating mangos." Both perfect and perfective can occur in the same sentence to stress current implications of a past act, e.g. "I've already eaten the mangos (so don't feed me any more," wo chi.le manguo LE.

In discourse terms, both LE's occur when the speaker is summarizing what she sees as the conclusions or consequences of an event. Both tend to occur at the end of speech turns and episode boundaries. Current Relevance LE has overtones of closeness and concern with the hearer, and so is especially common in adult speech to children.

Adult speech can distinguish between an sentence-internal perfective verb suffix, and the sentence final particle which can follow a noun to indicate Current Relevance. But since every single child use was sentence final, all were ambiguous between the perfective and Current Relevance meanings. Even so, careful analysis shows that between 80% and 90% of child -les referred to immediately past events. Nonetheless, the two-year-olds showed a surprising resistance to all these enticements, for I found only 171 post-verbal uses of -le in the 4,203 utterances taken from ten hours of tapes.

TRIGGERS FOR THE PERFECTIVE. Since language does not convey experience directly, speakers must schematize their raw perceptions as a coherent event before they can offer any comment on them. This is much easier if the event being described has been completed, but is still in the immediate past which is available to short-term memory. On-line narrations of rapidly changing actions such as a sportscaster's play-by-play analysis, (or the researcher's taped description of child gestures), are extraordinarily fatiguing to sustain, as well as being extremely

error-prone. It is almost impossible for the speaker not to pause until the outcome of an ongoing action is clear. While a play-by-play analysis is in the present progressive, most ordinary narratives use perfective or past markers.

The Chinese children followed this trend by using the perfective -le for immediately past events which had a clear end point. However, a second, less predictable, set of features all converge around the degree of personal involvement which the child has invested in the event described. The more salient perceptual support the child receives from the the event to be described, the better she is able to maintain an active schema in short-term memory for long enough to formulate a remark which can include extra aspectual information. In addition, the more directly the experience affects the child, the better she is able to judge what part of the ongoing action constitutes an end point which is newsworthy enough to comment on with a perfective.

I derived the following features which trigger the perfective in child Mandarin by comparing matched sets of sentences with and without -le. I have ranked the features by the degree of statistical significance on a chi square, though all are significant above the p = .001 level.

TABLE 2 RANKING OF FEATURES CORRELATED WITH -LE PERFECTIVE

RANK NUMBER	FEATURE	SIGNIFICANCE SCORE
1	Pastness of Event	103
2	Clear End Point	100
3	Re-enactment Potential	95
4	Transitivity	67
5	Agentivity	13

Pastness. Only about 30% of general speech refers to the past, as Table 1 shows. These unmarked past statements typically describe a sustained actions by another person which had occurred earlier in the day, e.g. Lao Hu told me that his sisters had gone swimming by repeating, youyong, youyong, "swim, swim." Pang occasionally used unmarked verbs to refer to her own past habituals as well, e.g. hiao hua "water flowers," which described the previous summer six months before. Her unmarked references to habitual actions increased significantly over the three month study, (r = .87).

Perfective verbs contrast strongly with unmarked ones. An average of 85% of the perfectives refer to a past event. All but one of Lao Hu's le which refer to real rather than pictured events describe the

immediate past. Seventy-six percent of Pang's -le uses also refer to the past.

TABLE 3 REAL TIME REFERENCE FOR LE

	PAST	PRESENT	FUTURE
Lao Hu	95%	5%	-
Pang	76%	9%	15%

Degree of pastness. The children used -le primarily to refer to the immediate past, as Table 4 demonstrates. Ninety-five percent of the perfectives referred to the immediate past, while only 63% of their unmarked past references described an immediately elapsed event. Pang was in the process of extending both her unmarked and marked time references to include more distant events. These included both recent events, which had occurred within the past twenty-four hours, as well as distant past events, defined as those occurring more than twenty-four hours previous. Pang significantly increased her use of -le for past events in the three month study ($r = .68$). However, she did not begin using temporal adverbs regularly until about age 2.6.

TABLE 4 DEGREE OF PASTNESS

UNMARKED PAST EVENTS:	IMMEDIATE PAST	RECENT PAST	DISTANT PAST
Lao Hu	62%	38%	-
Pang	64%	19%	18%
MARKED WITH -LE:			
Lao Hu	100%	-	-
Pang	92%	2%	4%

Both marked and unmarked past references used a full semantic range of predicates, including agent-actions, patient-processes, and statives. This finding supports Weist's 1984 assertion that past marking appears cross-linguistically for a full range of predicate types, rather than being confined to semantic completives, as the defective tense hypothesis

contends. (Weist, 1984.)

Pastness has a privileged cognitive salience. This is true both in languages with aspect but no tense, such as Mandarin; as well as in languages with tense but no aspect, such as Hebrew. In Berman and Dromi's study of Hebrew-speaking children, past tense reference was the only tense to increase throughout childhood, as well as being the only tense to appear across all semantic verb types, just as it does in Chinese. The remembrance of things past elicits lengthy discussion in infant speech as well as in literary reminiscence.

A clear end point is almost as powerful a trigger as pastness. Punctual aspect, the momentary quality of a situation, is very strongly correlated with -le use. While some verbs like "fall" or "cough" are inherently punctual, more durative verbs may also be used to express a clearcut end point, e.g. "she came here." Chinese resultative complement expressions play a critical role here in marking end points on durative actions, e.g. jiangwan.le, "talk+finish+perfective," I've finished talking."

Durative events are much less newsworthy than punctual ones. It is no accident that the cliche for unbearably dull experiences, "as exciting as watching paint dry," describes the agonies of being forced to stare at a static background, rather than the action on the field.

Re-enactment potential expresses the degree of sensory support which the child has for rehearsing the event she wants to describe. I scored re-enactment potential as the mean of the statistical correlations for: imitations of adult speech, family routines, events in which the child was the agent, immediate past, and picture story stimulus.

Lao Hu was particularly inclined toward spontaneous imitations of immediately preceding adult speech. Children in general are particularly tempted to imitate actions and speech which are just barely beyond their current abilities. Although the Chinese adults never consciously modelled -le, nor commented on the children's usage of it, the children were particularly likely to imitate adult utterances with -le.

Family routines also elicited many pefectives. These included: "little sister fell sleep," meimei shuijiao.le. "I ate [it] all up," wo chiwan.le. The only three uses of -le for distant time are family routines: two uses of "mama's gone to work," mama shangban.le; and one "elder sister's gone to school," jiejie shangxue.le. The mother had gone on a business trip to Los Angeles the previous month, while the sister had started nursery school several months before. The children also used such routines in spontaneous pretend play, and descriptions of picture books, as well as in response to well-rehearsed adult cues.

The children also used significantly more perfectives when they described pictures in their favorite storybooks. While most of their comments simply named the objects in the pictures, they also included some fragments of narratives. Some of these comments were clearly familiar routines, but others were the children's own inventions. For example, Pang pointed at a picture of a frog whose feet had been crushed by a log, then did a babyish reduplication, popo.le, roughly

equivalent to English "breaked."

The children were much more likely to use perfectives while they were so eagerly identified with the story that they were actively pointing to the characters on the page. Since the perfective and current relevance -le both mark episode boundaries, turning the pages of the book automatically segments the scenes in the story. The Chinese end stories by saying jiangwan.le, "[I] have finished telling [it]." This also directs attention to completion.

Sometimes the adults tried to coax an unenthusiastic child into talking by using the same books. If the child was uninvolved, she produced mainly perfunctory lists of nouns to name the objects in the pictures, with very few verbs or perfectives. Experimental elicitations would have to underestimated the child's competence even more severely. Personal identification was more important than the nature of the stimulus for these Chinese children. Comments about family photographs and photos of babies in advertisements prompted particularly rich language. While Lao Hu and Pang were too young to tell any spontaneous stories, -le is prominent in narratives after Pang and the other Taipei children reached aged 2.6.

Auditory clues from imitations and family routines seem to be more powerful triggers for perfective than visual clues from pictures. Of course, the verbal cues were direct models for speech, while the pictured scenes only provided a possible topic for a response in a different modality.

Agentivity is the other strong aid to sensori-motor re-enactment. Although the majority of the child's unmarked active verbs referred to her own activities, perfective marking was significantly more likely to appear during self-reference. In fact, only 3% of perfectives referred to any agent other than the child. Overall, 73% of perfectives referred to the child, 13% to characters in pictures, 11% to objects affected by the child's manipulations (e.g. balls and tricycles). As we have seen, three of the non-child agents with perfectives appeared in family routines. Virtually all the remainder described the movements of toy vehicles which the child manipulated, as in "the car crashed," for a tiny car which the child was dipping into a cup of water.

This egocentrism is further reflected in the child's selective use of motion verbs. The child's own movements are typically expressed as movement away from the self as center by using the qu "go" verb, e.g. "I've gone down" wo xiaqu.le to describe jumping off the sofa. Movements of other people and objects, however, are described as coming toward the child, with the lai "come" form, as in che.zi shanglai.le, "the car came up."

Transitivity scores somewhat lower than re-enactment. Since transitivity indicates the potency and affectedness of the agent and patient, I combined the scores for the correlation of le with: agent-action, patient-process, and the negative correlation with stative verbs. Since so much ordinary speech was agentive, -le correlates most strongly with the few patient-process verbs in the sample.

CONCLUSION In sum, young children express their more elaborate time and aspect distinctions when they are talking about the events which affect them most directly. Personal involvement is a far more powerful trigger for aspect marking than syntactic or semantic factors are. The nature of the event and its time of occurrence pale by comparison. This parallels results for Turkish children who learn the -*di* past tense for past events which they have directly experienced directly, well before they master the -*mis* past tense for inferred information. (Slobin and Aksu, 1982).

Time-marking is easier for well-wrapped packages of experience. We are most likely to have a clear vision of a very clear result in the immediate past. We also flesh out our conversations with well-learned routines, as well as by copying and expanding on the remarks of our fellow conversationalists. In this, the Chinese two-year-olds are merely making use of a universally efficient cognitive strategy when they let us know that their most riveting, perceptually salient, experiences have been recently completed, and are currently relevant as well. It takes years to learn to speak from a perspective outside from one's own experience; not one of us ever learns to do so completely.

REFERENCES

Ruth A. Berman and Esther Dromi. 1984. "On Marking Time Without Aspect in Child Language." Papers and Reports on Child Language Development. V. 23.

Mary S. Erbaugh. 1982. "Coming to Order: Natural Selection and the Acquisition of Syntax in Child Mandarin." Unpublished Ph.D. dissertation in linguistics. University of California at Berkeley.

———— 1978. "The Acquisition of Temporal and Aspectual Distinctions in Mandarin." Papers and Reports on Child Language Development. V. 15.

Lorraine Harner. 1982. "Talking about the Past and the Future." In William J. Friedman, ed. Developmental Psychology of Time N.Y. Academic Press.

Charles N. Li and Sandra A. Thompson. 1981. Mandarin Chinese: A Functional Reference Grammar. Berkeley, CA. University of California Press.

Dan I. Slobin and Ayhan A. Aksu. 1982. "Tense, Aspect, and Modality in the Use of the Turkish Evidential." In Paul J. Hopper, ed. Time-Aspect: Between Syntax and Pragmatics. Amsterdam/Philadelphia. John Benjamins Company.

Richard M. Weist. 1984. "Tense and Aspect: Temporal Systems in Child Language." In P. Fletcher and M. Garman, eds. Language Acquisition: Studies in First Language Development. Second edition. Cambridge. Cambridge University Press.